

CHAPTER 2

AGE AND SECOND LANGUAGE ACQUISITION - A REVIEW OF LITERATURE

2.1 INTRODUCTION

The appropriate age for introducing a second language to children has been one of the few truly perennial issues in the field of SLA. A number of empirical studies have been designed to investigate the question of optimal age to learn a second language. Age has often been considered a crucial factor in the field of second language acquisition. Various hypotheses have been proposed to account for the correlation of age, rate and quality of second language acquisition. This chapter provides a comprehensive review of the literature available on aspects related to the role of age in second language acquisition and further discusses the hypotheses and theories relating to second and foreign language learning of young learners.

2.1.1 Critical Period Hypothesis (CPH)

The idea of the existence of a critical period for language learning that ceases before puberty was popularized by Canadian brain surgeons Penfield and Roberts (1959). Penfield hypothesizes that the child's brain plasticity makes for superior ability, especially in acquiring units of language. According to Penfield, the best period to begin the teaching of a second language was between the ages of 4 and 10.

Lenneberg (1967), acknowledged as the ‘father’ of the Critical Period Hypothesis claims that the acquisition of language is an innate process determined by biological factors, which limit the critical period for acquisition of a language from two years of age to puberty. He also claims that the end of the critical period coincides with the lateralization process, a process by which the two sides of the brain develop specialized functions. Later researchers further distinguished between a weak and a strong version of the CPH (Singleton and Ryan 2004). The weaker version states that language acquisition must begin within the critical period, and that the sooner language acquisition begins after the onset of the critical period the more efficient it will be. The stronger version claims that even if language acquisition begins within the critical period it does not continue beyond the end of that period.

The existence of ‘multiple critical periods’ has been pointed out by researchers Seliger (1978) Long (1990) Knudsen (2004) who claimed that there may be more than one critical period for learning different aspects of a language. The ‘ultimate attainment’, (refers to the outcome or end point of acquisition) or the outcome of L2 acquisition in pronunciation seems to be more sensitive to the critical period than that of grammar, morphology and syntax. The difference that exists in the nature of phonological acquisition and other aspects of language has led to the theory of ‘multiple critical periods’. Further, Seliger claims that an authentic accent in an L2 is not usually acquirable beyond puberty, whereas syntactic skills are acquirable much later in life.

Based on a research on the Korean learner, Robertson (2002) suggested that the term ‘windows of opportunity’ is more apt than ‘critical period’ as the word ‘critical’ implies that teaching a second language after the age of 14 is highly impossible. It would be more relevant to consider the

period between 2 and 14 years of age as an excellent ‘window of opportunity’ for learning an L2.

2.2 KRASHEN’S MONITOR MODEL

Krashen (1981) used the labels ‘acquisition’ and ‘learning’ to refer to the unconscious assimilation or ‘picking up’ of language and the conscious mastering of its rules. The distinction gains significance in the context of child language learning. According to Krashen, the child engages in ‘acquisition’ when developing his/her L1 and also when learning a new language. He also points out that adults retain this ‘acquiring’ capacity and are also able to supplement it with conscious ‘learning’.

Krashen pointed out the advantage of adults in learning an L2 as they have ‘two independent systems for developing ability’ in a second language. The two systems have been termed as ‘sub-conscious acquisition’ and ‘conscious learning’. He further adds that ‘conscious learning’ is available to the performer only as a ‘monitor’ and hence the term ‘Monitor Model’.

Krashen suggested that ‘L1 plus Monitor’ mode helps adult learners to learn an L2 faster than young learners. It also enables the learners to interact with the native speakers of their target language, thus promoting access to meaningful, ‘comprehensible input’, which implies that sufficient quantity of exposure is the condition for acquisition to take place.

The ‘L1 plus Monitor’ mode constitutes a mechanism for turning ‘learned’ knowledge to account in the furtherance of ‘acquisition’. According to Krashen, the input obtained in this way is all the more likely to be comprehensible because of an adult’s greater cognitive maturity, which plays a crucial role in conversational management. He further elaborates that more

than children, adults' work harder in encouraging more language from their conversational partners. They also indicate more when they have not understood, and therefore are better at keeping conversations going.

2.3 HYPOTHESES RELATING TO SLA

Newmark and Reibel's (1968), 'Ignorance hypothesis', claims that 'transfer' is the result of a falling back on L1 resources when L2 competence is insufficient to meet communicative needs.

The Pidginisation Hypothesis or the Acculturation model (Shumann 1978) claims that success in L2 acquisition depends on the quality and duration of contact between the learner and the target language and culture. These aspects are in turn dependent on the degree of social and psychological distance between the learner and the target language. Social distance refers to the learner groups' and target language groups' attitudes and expectations and the relative size and cohesiveness of the two groups. Psychological distance refers to learners' degree of ease or unease with the target language and culture, as well as their personal motivation. These two aspects assume greater significance in the context of second language learning as the social and psychological distance determines the fossilization of the learner's interlanguage. If the social and psychological distance is great, then the learner's interlanguage will fossilize at a stage of development, which is comparable to a pidgin language, if the distance is small, then the learner's interlanguage will develop steadily towards target language norms.

The Acculturation Model suggests that children normally have less difficulty than adults in adapting themselves to a new culture and does not claim the existence of a maturationally determined decline in language learning capacity. One of the significant aspects of the model is that it allows for the possibility of completely successful L2 learning at any age, which

accords with research findings that some adults do learn a second language to native-like levels.

The Fundamental Difference Hypothesis, proposed by Bley-Vroman (1989), claims that the inborn mechanism that children have is no longer operative in adulthood and as a result adults must rely on general problem-solving procedures.

DeKeyser (2000) interpreted the Fundamental Difference Hypothesis by pointing that the hypothesis highlights not just the young learners' long-term superiority, but older learners' short-term superiority. However, older learners learn faster because adult second language acquisition is explicit, and adults rely on analytical thinking to acquire their second language.

One of the most significant distinctions between 'Basic Interpersonal Communicative Skills' (BICS) and Cognitive / Academic Language Proficiency (CALP) was introduced by Cummins (1979). Bruner (1975) referred to this distinction as 'communicative and analytic competence', whereas Donaldson (1978) used the labels 'embedded and disembedded language' to refer to this distinction, and Olson (1977) refers it as 'utterance and text.' The labels used by different investigators vary, but the distinction refers to the extent to which the meaning that is communicated is supported by contextual or interpersonal cues. The distinction was intended to draw attention to the very different time periods required by immigrant children to acquire conversational fluency in their second language as compared to grade-appropriate academic proficiency in that language. According to Cummins, some of the aspects of language proficiency are closely related to the development of literacy skills in L1 and L2, which are referred to as CALP. Proficiency in conversation comprises aspects such as accent and sociolinguistic competence, which are referred to as BICS.

A great deal of research has been conducted to investigate the differences between context-embedded/ context-reduced, cognitively undemanding/cognitively demanding language skills (Cummins 1981). In a context-embedded communication, the meaning being communicated is supported by contextual or interpersonal cues such as gestures, facial expressions, and intonation present in face-to face interaction. A context-reduced communication relies primarily on linguistic cues to make meaning. Cummins (1980) cited research evidence from a study of 1,210 immigrant children in Canada indicating that it takes these children much longer to master the 'disembedded language skills' (Donaldson 1978) required for the regular English curriculum than to master oral communicative skills. The term 'linguistic façade' is used by Cummins to refer to children who appear to be fluent in a language because of their oral fluency but have not mastered the more disembedded aspects of the language. This state of learning a language can be seen in most Indian children.

Research studies have been carried out to validate the claim that second language learning enhances cognitive development. Many such studies that examine the relationship between L1 and L2 learning make reference to the 'Threshold hypothesis' and the 'Developmental interdependence hypothesis' formulated by Cummins (1979). The 'threshold hypothesis' states that the level of L1 and L2 competence of a learner determines whether s/he will experience cognitive deficits or benefits from schooling in the second language. The 'Developmental interdependence hypothesis' claims that when the use of the L1 is promoted by the child's linguistic environment outside the school, then a high level of L2 achievement is likely to occur at no cost of L1 competence.

Cummins' hypothesis maintains that language skills are being transferred from one language to the other. Many research experiments

carried out on this aspect of SLA have provided evidence for the claim that the cognitive abilities acquired in the learning of one language can be put to use in the acquisition of another language, and the first language skills are enhanced even with reduced instruction in L1.

Bialystok (1994) proposed a model from a cognitivist basis, which runs parallel to Cummins's educational approach. According to this model, language is represented in two different ways. One form starts early before five years of age, and is most clearly revealed in situations in which language is used orally and aurally. A second form of representation contains Language-Specific Details (LSD) such as vocabulary and morphosyntactic structures and allows learners to solve more formal problems with language. Bialystok claimed that formal tests such as grammar tests require learners to consult knowledge explicitly and such tests are handled better by older learners. In contrast, younger learners perform better in oral comprehension and pronunciation tests.

2.4 THEORIES ON CHILD LANGUAGE LEARNING

Some of the theories put forth by Piaget (1967), Vygotsky (1962) and Bruner (1966) show the inevitable link between cognition and language development in children. Piaget's theory reiterates that any kind of teaching can be effective only when the child is able to assimilate what is said and done, a concept he termed as 'learning readiness'. Teaching by asking questions and by demonstration can influence the intellectual development of children only when they are ready for it.

The issue of the nature of language and its effect on intellectual development has been discussed by many theorists. The views of Piaget and Vygotsky differ in this aspect. Piaget states that the structure of thinking, mental actions and operations are derived from action and not talk, and

language exerts no formative effect on the structure of thinking. On the other hand, Vygotsky points out that in the initial stages, speech serves as a regulative, communicative function, and later transforms itself the manner in which children think, learn, and understand. The teaching and testing of oral skills to young learners needs to be discussed against this theoretical framework. The crucial role of speech in influencing learners' ability to think, learn and understand lays special emphasis on the significance of teaching and assessing the oral skills of young learners.

Bruner (1966) emphasized the role of language, instruction and communication in the development of knowledge and understanding. In this aspect, Bruner and Vygotsky express similar views. One of the core tenets of Vygotsky's theory is the Zone of Proximal Development (ZPD), which is defined as 'the distance between the actual developmental level as determined by independent problem-solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers'. Vygotsky emphasizes the social nature of knowledge acquisition and points out that the human child is able to solve more complex tasks through collaboration.

Influenced by the theories propounded by Vygotsky, Bruner introduced the concept of Language Acquisition Support System (LASS) and held the view that children's language and learning development take place through the processes of social interaction with an adult support and help component. The interactional partner provides a structure of framework which, Bruner referred to as 'scaffolding'.

Second language classrooms offer ample scope for research as they enable the teachers to reflect on their teaching styles and thereby improvise or modify their method or style of teaching. Ellis (1984) categorized the features of classroom discourse. These features have been clustered under three

groups, namely, the teacher's use of language, types of activity used and support provided and the learner's use of language. While discussing the nature of the language input, he points out that both the qualitative and the quantitative nature of the speech addressed to the young learners is very important.

One of the theories that explains how first language learning may affect subsequent second or foreign language development is the 'Competition Model'. This model suggests that different languages have different ways of conveying meaning and the particular ways in which a language encodes meaning acts as 'cues' to interpreting the meaning of what is said. Studies carried out across different languages have led to the important conclusion that children become sensitive to the reliability of cues in their L1 from early infancy. The model also proposes that as babies, they learn to pay attention to particular cues, which hold useful information for meaning and they will transfer these first language strategies to make sense of L2 sentences.

The cognitive approaches to language learning do not support the claim that language learning capacity declines at puberty. Ausubel (1964) argues that adults are better equipped for further language learning in two major ways. Adults' concept development enables them to learn the vocabulary of a new language faster than that of children.

2.5 TASK BASED LANGUAGE LEARNING- TASK DEMANDS AND SUPPORT

Cameron (2001) analyses tasks from a learning perspective that takes account of young learners' social and cognitive development. Children are mentally active as learners as they try to find a meaning and purpose for activities that are presented to them. Their urge to find meaning and purpose

in activities is a powerful language learning tool for teachers to exploit. However, Cameron points out that even the most motivated child can have problems making sense of the activities, which they are asked to participate in and hence the tasks and activities presented to young learners need to provide an appropriate environment for language learning.

Cameron further analyses the environment created by an activity in terms of demands on learners and support for learning. The demands are primarily Cognitive and Language, besides other demands, such as Interactional, Metalinguistic, Involvement and Physical. Cognitive demands are those related to concepts, and to understanding of the world and other people. Language demands are those related to using the foreign language, and to the use of the mother tongue in connection with learning a foreign language.

Pair work requires each pupil to listen to his/her partner and this could be an example of an interactional demand. Metalinguistic demands would require learners to understand or use English to talk about the language. The difficulty or ease the learner has in engaging with the task or activity is referred to as involvement demands. However, it has been suggested that these demands vary with the nature of the task presented to the learner.

The types of support for learning have been categorized in the same way as the types of demand. Cognitive support can be provided by contextualizing the language to be used and also by presenting familiar topics and content. Language support can come from re-use of language already mastered and also by moving from easier domain to more difficult. Interactional support can be provided by helpful peers and by pair work. Clear explanations and familiar technical terms to talk about new language would provide metalinguistic support. Support for involvement can come from

content and activity that are easy for the learners to carry out the task assigned to them. Finally, physical support can be provided by using familiar actions that help learners develop their motor skills.

Cameron puts forth a significant point while discussing the demands and support of the task presented to learners. The dynamic relationship between the demands and support is of paramount importance as it decides whether learners can do the task, and whether they learn anything from doing it. The demands of the task should not be high, as it would discourage learners and similarly too much support provided would not be beneficial to young learners. In trying to strike a balance between demands and support, it is suggested to apply 'the Goldilocks principle', which states that 'a task that is going to help the learner learn more language is one that is demanding but not too demanding, that provides support but not too much support.'

2.6 RESEARCH STUDIES ON THE ROLE OF AGE IN SLA AND OTHER RELATED ASPECTS OF TEACHING ESL TO YOUNG LEARNERS

There are many research studies that provide evidence both in support of and against the benefits of introducing a second language to young learners.

Ekstrand (1976) studied 2,189 eight-to-seventeen year-olds learning Swedish as a second language over a two-year period. The results of the study indicated that older children performed better than younger children on tests of listening comprehension, reading, free writing, pronunciation and speaking.

Fathman (1975) used SLOPE, a picture-cued sentence completion test to measure the performance of adolescents between eleven and fifteen and

children between six and ten years of age. The results of the study favoured the adolescent group as they outperformed six-to-ten year olds on morphology and syntax, although the younger group performed better on pronunciation.

Carroll's (1969) and Burstall (1975) research studies reiterate the significance of instruction in learning an L2. One of the major findings of these studies is that the amount of instruction is the most important predictor of L2 learning success.

Cummins (1980) and Swain (1981) claimed that older learners show a high mastery of L2 syntax, morphology and other literacy-related skills such as vocabulary and reading comprehension due to their greater cognitive maturity. However, in the areas of accent and oral fluency they do not show an advantage because these appear to be among the least cognitively demanding aspects of both L1 and L2 proficiency.

In another study Fathman and Precup (1983) gathered speech samples and measures of oral proficiency in English from two groups. The first comprised 20 adults and 20 children learning English in the United States in primarily informal settings, and the second 20 adults and 20 children learning English as a foreign language in Mexico in formal settings. In both studies, the results favoured children in pronunciation, whereas the adults outperformed children in syntax.

A study by Munro and Derwing (1995) suggested that a strong foreign accent does indicate a reduction of comprehensibility. Based on the findings of the study, Cook (1995) claimed that 'accent may be the least important aspect of L2 proficiency, and that older learners who fail to acquire a native-like accent lose little'.

Mc Laughlin (1992) suggested that because children have to learn shorter and simpler structures in their early acquisition days, there is an 'illusion' that children learn a second language more easily and quickly than adults. However, many research studies have yielded results contrary to the belief that younger learners are superior to adult learners in learning a second language.

The effect of age on the rate of second language learning has been the subject of many significant research studies. One of the most cited in this area is that of Snow and Hoefnagel-Hole (1978). 51 English speakers aged 3 to 60 learning Dutch in a naturalistic setting and 85 aged 5 to 31 in the laboratory set up were chosen for the study. The results revealed that older children and adults were better than younger children in vocabulary, morphology, and syntax. It was also reported that even in the laboratory setting, the older participants performed better than the younger participants.

The Pea body picture test was employed by Snow and Hoefnagel-Hole (1978) to examine pronunciation, morphology, sentence repetition, vocabulary, auditory discrimination and translation skills of 100 native speakers of English living in Holland. The study was carried out by classifying them according to their age. The findings indicated that the youngest children performed worst, while the adolescents were the fastest and achieved the highest proficiency in rule-governed aspects of language, such as morphology and syntax. Even in pronunciation they achieved high scores followed by adults.

The pronunciation performance of learners has often been the focus of many empirical studies that examine the relationship between age of acquisition and L2 development. A number of recent studies suggest that even adults are capable of attaining a native-like accent. The study conducted by Nikolov (2000) comprised thirty-three successful language learners of the age

between 20 and 70, all of whom had acquired their target language after puberty. She points out that,

These successful language learners want to sound like natives, they share intrinsic motivation in the target language which is often part of their profession, or they are integratively motivated. They work on the development of their language proficiency consciously and actively through finding chances for communication with speakers of the target language, reading and listening effectively (Nikolov 2000).

Reiterating the need for fulfilling certain requirements for successful second language instruction to younger children, Nikolov observes,

If any of the requirements are missing, second language instruction should not begin at an early age; a negative experience may harm children's attitude to the target language and language learning in general (Nikolov 2000).

The younger-is-better hypothesis does not have strong empirical support in school contexts. The research findings suggest that because of cognitive and experiential limitations, younger children are at a disadvantage over older children in their ability to learn a second language.

Similar studies conducted in school situations support the claim that older children are faster compared to that of younger children in learning a second language. Oller and Nagato (1974) conducted an experiment in a school in Japan with pupils who began learning English at the primary level and with those who began in secondary school. The findings of the study indicate that by Grade 11 the early starters did not retain their superiority, despite the additional six years of English study they had in primary school.

The need for greater knowledge and understanding of child development and learning has been emphasized by Brewster (1991). The author reinforces the necessity for fulfilling certain classroom conditions for better understanding of good educational practice in the teaching of English to young children.

The research findings documented by Ellis (1984) suggest some of the significant features of classroom discourse, which are important in second language development. Both qualitative and quantitative aspects of the speech delivered to the child are crucial in the second language development of children.

In formal or experimental environments, it has been established by researchers that older children have better proficiency outcomes than younger children. Otomo and Toyota (1962) assessed the listening comprehension, vocabulary and pronunciation of 148 children from grades 2 to 4. The audio-lingual method was adopted for the study. The results indicated the existence of a linear relationship between age and L2 learning in all aspects of language acquisition.

One of the studies conducted by Olsen and Samuels (1973) found that the performance of American English-speaking adults and adolescents was significantly better than children, after 15-25 minute German pronunciation sessions.

Twenty adult, native speakers of English were given 18 hours of intensive instruction in the pronunciation of Chinese and Japanese by Neufeld (1977). The purpose of the study was to test the 'nativeness' of their pronunciation. An imitation test was given to the learners and their utterances were judged on a five-point scale by native speakers of two languages. Nine subjects for Japanese and eight for Chinese had acquired native-like

pronunciation. The result of the study suggests that under right conditions even adults can achieve native ability in pronunciation, a finding which runs counter to the Critical Period Hypothesis.

Research studies on maturational constraints in second language learning provide further insights on the issue of age in SLA. The findings of these studies favour an early start, but disagreements concerning the cause of those constraints continue to prevail. Augullo discusses the issue of age in L2 and FL contexts and points out that,

Children are better learners if teachers focus on their implicit acquisition processes, emphasize their memory traits, and foster holistic processing of meaning in context, always providing massive amounts of input (Augullo 2006).

The findings of research studies also support the hypothesis that age plays a crucial role in SLA. The linguistic competence of 21 highly proficient non-native speakers of French, who had started learning an L2 as adults was compared with that of 20 native speakers by Coppieters (1987) using a grammaticality judgment task. The results showed that the performance of the native speakers was significantly better than that of the highly proficient non-native speakers. The research findings suggest that despite the native-like performance of these L2 learners in speech production, their grammatical competence differed from that of the L1 speakers. This study claims that learners who started learning an L2 after puberty did not seem to be able to achieve native-like proficiency in grammatical constructions.

In another significant study on the issue of age in SLA, Birdsong (1992) found no evidence of any notable differences between the groups that were used for the experiments conducted by Coppieters (1987). A modified

replication study was conducted, and based on the results, it was concluded that there were no significant differences between the performance of French and L2 learners of the language. Another research (1992) conducted by Birdsong showed that there was no evidence of any marked differences between 20 English-speaking learners of L2 French, who were near native in their oral ability, and 20 native speakers of French. The 'think-aloud' data from the participants were collected when performing their grammaticality judgment task. The findings of the study indicate that some learners who start learning L2 after puberty can also attain native-like proficiency.

That reflection on the processes of listening being beneficial for young learners was a major finding of the research conducted by Vandergrift (1999). The comprehension tasks and reflective exercises, which were completed by Canadian Grade 4 to 6 beginning level core French students sensitized the learners to various processes involved in effective listening and helped them develop their metacognitive knowledge.

Moon (2008) pointed out that contextual factors, which include the role of English in society and the purpose of teaching English are the significant determinants on when L2 literacy is introduced. Criteria such as the basic literacy skills of children in the L1 and the desire to read/write in L2 need to be analyzed before deciding on when to introduce L2 literacy to young learners.

Many experimental studies have provided authentic data on the role of age in SLA in young children. Some of them favour the CPH. Penfield and Roberts (1959) claimed that children under nine can learn up to three languages. They argued that early exposure to different languages activates a reflux in the brain allowing children to switch between languages without confusion or translation into L1.

Some of the merits of early language learning have been listed out by Andersson (1960). Learning has been differentiated as conditioned and conceptual learning. Based on the studies available on language development in children, it was concluded that a child's linguistic achievement is the result of conditioned and conceptual learning. In infancy and the early years of childhood, conditioned learning takes place whereas conceptual learning is still at a minimum. As the child grows, the capacity for conditioned learning declines, while the reliance on conceptual learning increases. The earlier a second language is learnt the more it is possible to acquire it in a way which is similar to first language learning.

Andersson's argument that second language is profitable between four and eight has not had great impact in recent times on studies relating to child language learning as later researchers particularly Long (1990) and Knudsen (2004) point out that there may be more than one critical period for learning different aspects of a language. Researchers point out that stronger factors like personal motivation, anxiety, input and output skills and settings have a greater role to play in child SLA.

Research studies carried out in naturalistic learning situations provide evidence in support of CPH.

Oyama (1976) investigated 60 male immigrants at ages ranging from 6 to 20 years, who had migrated to the United States and were residents for about 5 to 18 years. Two adult native speakers were assigned the task of judging the nativeness of the learners' accent in two 45-second extracts taken from performance on a reading-aloud task and a free-speed task. The results of the study indicated that the youngest arrivals performed in the same range as native speakers.

67 educated immigrants to the United States who had entered the country before the age of 15 were rated as more syntactically proficient than learners who had entered after 15 by Patkowski (1980). The findings were confirmed by Johnson and Newport (1989) by conducting an experimental study with 46 native Koreans and Chinese who had arrived in the United States between the ages of 3 and 39. The subjects were asked to judge the grammaticality of 276 spoken sentences, half of which were grammatical. The results confirmed that older the learners were at their arrival to the country, the lower their scores.

The findings of research studies also point out the superiority of older learners in learning a second a language in formal settings. A short-duration experiment involving children and adults was conducted by Asher and Price (1967). The experimental study involved 96 pupils from the 2nd, 4th and 8th grades, and 37 under-graduate students. In three short training units subjects listened to taped commands in Russian and watched them being responded to by an adult model. Half the subjects simply observed, while the other half imitated the action of the model. The training sessions were followed by a retention test in which each subject was individually required to obey commands in Russian heard during training and also new commands. The results indicated that the adults dramatically outperformed the children and adolescents.

A phonologically-oriented study conducted by Politzer and Weiss (1969) involved subjects from the 1st, 3rd, and 5th grades of an elementary school and from 7th and 9th grades of a junior high school. The L2 involved was French, of which the subjects had no knowledge. The experimental procedure comprised an auditory discrimination test, a pronunciation test and a recall test. The results indicated an improvement of scores with increasing age in all three tests.

Oller and Nagato (1974) investigated the long-term effect of FLES (Foreign Languages in Elementary School) instruction in Japanese schools. The study involved 233 subjects drawn from the 7th, 9th and 11th grades of a private elementary and secondary school system for girls, and at each grade level included some pupils who had experienced a six-year FLES programme in English and some who had not. The proficiency of the subjects in English was measured by administering a 50-item cloze test. The results of the study indicated a highly significant difference between FLES and non-FLES students at the 7th grade level, a reduced but still significant difference at 9th grade level. The results also indicated that at 11th grade level there was no significant difference between FLES and non-FLES students. The findings of the study are interpreted as evidence against the notion that FLES imparts long-term benefits. It implied that older beginners can learn as much in five years as younger beginners can in 11 years.

Mc Laughlin (1984) discusses the issue of learning styles of children and dismisses the myth of uniform learning styles of children. Of the two issues raised in the report, the first one relates to the differences among linguistically and culturally diverse groups and the second to differences among learners within these groups. One crucial difference is the difference in social class that needs to be addressed for providing equal learning opportunities to learners from the disadvantaged sections of the society.

Ervin-Tripp (1974) investigated 31 English-speaking children between the age group of four and nine who had been exposed to French in Switzerland for up to nine months. The subjects were tested for comprehension of syntax and morphology, imitation and English-French translation. The results of the study indicated that older children outperformed the younger ones in almost all aspects of the language.

The study conducted by Horwitz (1982) was different as the purpose of the investigation was to ascertain whether there was any relationship between conceptual level and competence in L2. The subjects were 61 English-speaking female pupils in the age group of 14 to 18 years from four schools in the United States. Tests were administered to determine subjects' conceptual level, their foreign language aptitude, their linguistic competence in French and their communicative competence in French. The analysis of the results of the study indicated that conceptual level and foreign language aptitude to be related to both communicative and linguistic competence. The conclusion of the study was that conceptual level appears to be an important individual variable in second language learning.

Cullen (1998) highlighted the importance of teacher talk and points out that it is now generally recognized as a potentially valuable source of comprehensible input for the learner. Quoting evidence from classroom research, he pointed out that aspects of teacher talk, such as the kind of questions teachers ask, can significantly affect the quantity and quality of student interaction in the lesson.

Hong and Morgan (2004) discussed some of the core issues involved in L2 acquisition (L2A) of children, adolescents and adults. They pointed out that among the multiple factors that affect L2A, age is the most pervasively dominant factor. However, there are even stronger factors such as personal motivation, anxiety, input and output skills, settings and time commitment that impact L2A.

The introduction of Partial immersion programs at the elementary level has encouraged researchers to examine the success of these programs in schools.

The Japanese Ministry of education introduced a 'Strong English Curriculum' supported by teacher-training programs and effective use of Assistant English Teacher (AETs) from Grade 3 onwards.

Keogh (2002) proposed a program based on the 'Staircase Model' developed by Michael Bert for partial immersion programs. The program, tailored to the needs of individual schools, is flexible and begins in Grade 1 with language awareness and gradually progresses to a mixture of partial immersion and enriched language arts. The program designed to fit the educational infrastructure in the local context raises serious concerns among parents. Parents were worried about the negative effects of early introduction of L2 on their children's L1 literacy skills. Some of the benefits of the program include the enhancement of the child's ability, receptiveness in other curricular areas and improvement in the meta-cognitive development of children due to bilingual education experience.

Robertson (2002) examined the effect of personal motivation, anxiety, input and output skills, settings and the time commitment on L2A. The results of the study indicate that for later learners their age related decline is much more variable and markedly differs from one individual to another. Another significant observation was that because of their greater memory storage and greater capability of their conceptual system, older learners may learn faster and more efficiently in some aspects of L2A.

Cameron (2003) argues that the continuing expansion of Teaching English to Young Learners (TEYL) poses challenges to the wider ELT field. The importance of providing effective teacher training is stressed as it is imperative to realize the objectives of teaching language skills to young learners. One of the key arguments put forth has been that the expansion is a phenomenon that needs to be taken seriously by the ELT field as it would have knock-on effects for the rest of the field.

Based on classroom observation data from case studies, Carless (2002) pointed out some of the challenges in implementing task-based learning with young learners and suggested some of the teaching strategies that can be employed to overcome them.

Piller and Jo Skillings (2005) investigated teacher behaviour, lesson delivery sequence of content and learning expectations of K-5 teachers at a school in New Delhi. Classroom observation, field notes, face-to-face interviews with thirty three teachers and administrators were the elicitation techniques adopted by the researchers for collecting data. One of their findings was that as learning strategies, the teachers whom they met adopted nine effective teaching strategies for facilitating the second language learning of young learners.

In an online forum report, Westwood and Arnold (2004) present a summary of some of the issues raised in an online discussion forum organized by the IATEFL Young learners' Special Interest Group. One of the prime issues discussed was 'differentiation' which was defined as an adaptive approach to teaching that is responsive to individual differences among learners. Differentiation seeks to personalize learning experiences as it considers children's current levels of ability, prior knowledge, strengths, weaknesses, preferences and interests. It was argued by many contributors that differentiation was essential for effective language teaching as it was required to communicate effectively with learners at different levels of language competence. However, the presence of some major obstacles such as large class size, rigid curricula, prescribed text books, teachers' work load and lack of time for preparation were pointed out in the report.

Birdsong (2006) points out the prevalence of a widespread belief that native-like attainment by late L2 learners is confined to one or few tasks and moreover, an individual, whose language learning starts late in

his/her life will not display nativelikeness across a variety of linguistic behaviours. This notion has been referred to as the 'Joseph Conrad effect'. Recent research studies, however, suggest that the attainment of nativelikeness among late L2 learners is possible.

Bourke (2006) reiterated the need for designing a topic- based syllabus with appropriate targets and goals set by syllabus designers for ensuring effective teaching and learning of ESL by young learners. He pointed out that learners should be ready for task-based learning to be successful and effective. Much of the success depends on learners' readiness. A structured communicative task can be effective only if learners know some English and success depends on the learners' readiness. A structured communicative task can be effective and successful only if the learners know some English.

Pinter (2007) pointed out the benefits of peer-peer interactions for young learners with low level of competence in English and suggested that communication tasks such as spot-the-difference can be introduced by teachers in their second language classrooms.

A study by Garcia (2007) focused on Young EFL learners' use of the L2 to convey different linguistic functions. The purpose of the study was to analyse the different ways in which teachers can promote the use of the L2 to express various functions in low-immersion contexts. One of the findings of the study is that the use of specific and well-planned activities by teachers would encourage very young learners to use the L2 to carry out different functions and also initiate interactions.

Based on the findings of recent research studies on the age issue, Contesse (2009) pointed out that there is no single 'magic' age for L2 learning as both older and younger learners are able to achieve advanced

levels of proficiency. He emphasized that both general and specific characteristics of the learning environment are also likely to be variables of equal importance or greater importance.

The capacity of young children to repeat foreign words accurately has been found to be distinctly limited according to Lengyel (1995). The study involved nine-year-old Hungarian children without L2 experience. They were expected to repeat recorded Russian words. Another study by Harley et al (1995) indicated that younger L2 learners do not pay sufficient attention when compared to older learners to phonological cues when interpreting sentences.

The empirical studies reported on the L2 learning ability of young learners also deal with the learning of foreign languages like French, German and Russian. Research studies that focus on learning English as a second language have been contextualized. The study conducted by Cummins was carried out in Canada, which has bilingual population groups, but differs in other aspects such as household income, parental involvement and the teaching methodologies adopted for teaching a second language.

The issue of context gains utmost significance as the present study has been carried out to assess the appropriateness of the teaching methodology in the Indian context. Many research studies have been carried out in different countries on the teaching and learning of English as a second language by young learners. Research studies conducted in Japan have certain aspects which are common to the Indian context. The study conducted by Oller and Nagato (1974) in Japan pointed out that early starters of a second language are in no way superior to learners who start learning a second language later. The teaching methodology adopted in Japan and India is to an extent similar though the use of technology to teach languages is extensive in Japan. But the major difference lies in the use of English for various

communicative purposes. In India, young learners get more opportunities to listen and also get exposed to the written language than learners in Japan. The introduction of a strong 'English curriculum' supported by teacher-training programs and effective use of Assistant English Teacher (AETs) from Grade 3 is similar to the introduction of English to young learners by various state governments in India. One major difference between the Indian and Japanese English curriculum is that the Japanese curriculum is more flexible and it begins with language awareness and gradually progresses to a mixture of partial immersion and enriched language arts.

2.7 BRAIN-IMAGING-BASED RESEARCH

The advancement of science and technology has encouraged researchers to analyse the issue of localisation of language functions. They have used two major technologies namely, Positron Emission Tomography (PET) and functional Magnetic Resonance Imaging (fMRI) to image the brain in the study of language processing. Both technologies image the brain in a dynamic way to detect changes over time.

Using magnetic resonance imaging technique, Kim et al (1997) investigated the differences in the representation of first and second language in the cerebral cortex of two different groups of bilinguals, one group which started learning an L2 early, and the other group which started late. The results of a sentence-generation task did not point out any drastic change in the activity in Wernicke's area, which is associated with comprehension and semantic processing. However, the researchers pointed out variations in activity relating to Broca's area, which is associated with output and syntactic processing.

2.8 THE BARCELONA AGE FACTOR (BAF) PROJECT

A nine-year research project (1995) that sheds light on the issue of age in second language acquisition is the BAF project, which has analysed the effects of age across the spectrum of the language learning process. The findings of the research studies are significant as they were carried out in formal, school settings. Due to its formal learning setting, the project has focused on the optimal levels that are realistically attainable through school education, rather than on unattainable native-likeness.

Many researchers took part in the project and researched different aspects of the acquisition of English as a foreign language by different age groups. One of the significant research studies conducted by Munoz (2006) pointed out that age differences in a foreign language context favour older learners in the short term due to their superior cognitive development and also due to the advantages provided by explicit learning mechanism which develop with age. The findings also indicate that where opportunities for implicit learning and practice are minimal, older learners may be quicker to acquire language aspects that involve explicit learning and memory. Younger learners may be greatly deprived of this advantage when there is not enough exposure and contact with the language for L2 to proceed in the same way as L1 learning.

The review of literature on the language learning ability of young learners in both formal and informal contexts points out that many research studies were carried out on aspects relating to listening comprehension, vocabulary, pronunciation, reading, speaking, morphology and syntax. The major findings of the early studies on child language learning highlighted the superiority of young learners in aspects relating to pronunciation. However, recent research studies have emphasized that motivation and interest to sound like the native speakers are the key factors that facilitate language learning, and therefore even adult learners are capable of attaining native-like

proficiency. Later researchers have stressed the need to analyze the influence of contextual factors, and the basic literacy skills of children in their L1 before introducing the study of a second language. Though there have been a plethora of empirical studies on various issues that deal with child second language learning, not many have been conducted to assess the appropriateness of the methodology used for teaching young learners from disadvantaged backgrounds. It is also apparent from the literature review that not many empirical research studies have been conducted to trace the link between the socio-economic background of young learners and its influence on learning an L2. The present study is one among the few studies that have been carried out to assess the appropriateness of the methodology used for teaching English as a second language to young learners from poorer background, who generally come from 'acquisition-poor environments'.

2.9 SUMMARY

This chapter has provided a detailed account of the theories relating to the second language acquisition of young learners by discussing the research studies in the area. It analysed the implications of the theories on the present research study. The various hypotheses put forth by researchers in the field of L2A of young learners have also been discussed. Further some of the core issues in the teaching and learning of English as a second language by young learners have also been analysed.